

ABSTRACT OF THE DISCLOSURE

A method and apparatus for determining and monitoring the status of telephone calls in a Next Generation Telephony Network (NGTN) is disclosed. The method detects protocols occurring between two or more network elements of a telecommunication circuit and control protocol used to initiate or to react to the events generated by the network elements. One sensor is connected to the telecommunication circuits to sense raw call progress signaling information indicative of an event relative to the call on the monitored line. Another sensor is connected to call control channel of a NGTN network element. The sensors are connected to a call processing system. The call processing system includes a call progress event analyzer module consisting of a call progress event processor and a call progress state machine, a NGTN event processor and a NGTN state machine. The call processing system also includes a protocol independent call processor module and a multi protocol analysis module. Raw call progress signaling information and NGTN message information are converted to logical call handling events and forwarded to the protocol independent call processor module for processing. The protocol independent call processor module includes a timer processor to keep track of timing of events. The call processing system also includes an alarm handler to keep track and generate alarms when an error condition occur after processing the call progress events and the NGTN message events.